

CLAIMS

1. A method of making a stacked microelectronic assembly comprising the steps of:

I. providing a flexible substrate having a plurality of attachment sites, said flexible substrate including a first surface and a second surface and having a plurality of electrically conductive terminals accessible at at least one of said first and second surfaces; test contacts accessible at at least one of said first and second surfaces; and wiring connected to said terminals and test contacts and flexible leads extending to said attachment sites;

II. assembling a plurality of microelectronic elements to said attachment sites;

III. electrically connecting said microelectronic elements and said leads;

IV. folding said flexible substrate and stacking at least some of said microelectronic elements in substantially vertical alignment with one another; and

V. maintaining said stacked microelectronic elements in said substantially vertical alignment, wherein said conductive terminals are exposed at a bottom end of said stacked assembly.

2. The method of claim 1, wherein the test contacts are exposed at a top end of said stacked assembly.

3. The method claim 2, wherein the terminals are accessible at the second surface and at least some of the test contacts are accessible at the second surface.

4. The method of claim 3, wherein at least some of the test contacts are accessible at the first surface.

5. The method of claim 2, further comprising the step of

disposing a spacer the flexible substrate between two adjacent microelectronic elements.

6. The method of claim 5, further comprising the step of adhering the spacer to the flexible substrate.

7. The method of claim 2, further comprising the steps of

placing a dam between two adjacent microelectronic elements;

disposing a curable liquid encapsulant composition between each of said two adjacent microelectronic elements and the flexible substrate;

curing the curable liquid encapsulant composition to form an encapsulant; and

removing the dam before folding the flexible substrate.

8. A method of making a microelectronic assembly, comprising the steps of:

I. providing a flexible substrate have at least one attachment site, said flexible substrate including a first surface and a second surface and having a plurality of electrically conductive terminals accessible at at least one of said first and second surfaces; electrically conductive test contacts accessible at at least one of said first and second surfaces; and wiring connected to said terminals and said test contacts and including flexible leads extending to said attachment sites;

II. assembling a microelectronic element to said attachment site;

III. electrically connecting said microelectronic element to said leads;

IV. folding said flexible substrate into a folded configuration having a folded portion; and

V. maintaining said flexible substrate in said folded configuration, said microelectronic element in said folded configurations;

VI. wherein said conductive terminals are exposed at a bottom end of said microelectronic assembly and said test contacts are exposed at a top end of said microelectronic assembly.